

## AGRICULTURAL HINTS.

### WELL-MADE CISTERNS.

They Assure a Reliant Supply of Pure Water for Stock.

Having noticed several articles on the subject of pure water for stock, and knowing its importance, and also that there are many localities where it is impossible to bring the water from springs or depend on the small supply from wells, I would recommend a well-constructed cistern or a number of cisterns connected together. Let us look to the roofs of available buildings at the first source of supplying water. Take a roof say of 42x52 feet, including projections, and we have 2,184 square feet of surface. Allowing the annual rainfall to be 38½ inches, a building of the dimensions given would catch, in a year, 82,411 gallons, or 1,633 barrels, which would be better utilized in this way than to be allowed to drip into manure piles, thus washing their goodness away. A cistern large enough to hold 1,633 barrels would have to be 20 feet in diameter and 23 feet deep, but as the rain does not all come at once, and it is not all used at once, the dimensions need not be quite so large.

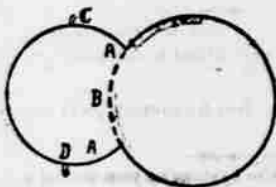


FIG. 1.  
A, corners of outside wall.  
B, filtering wall.  
C, D, inlet and outlet pipes.

In choosing a site do not make the mistake of building in an inconvenient place just to save a few cents' worth of spouting, but consider the number of steps you may save in a year. To illustrate: Mr. A. has a barn in which he keeps stock. To save spouting he digs a cistern at the opposite end, 51 feet from the stock, to which he carries 18 pailfuls per day; six rods per pail and 108 rods per day; 60½ miles in six months, when he might have built within 15 feet.

Do not make even a horse or a cow drink unfiltered water. There are always dust and dirt around a barn, especially if there is thrashing done near it, and a great deal will get on the roof and be carried by the rain into the cistern. Having had over twenty years' experience in building I like the following plan for general purposes as well as any I have ever tried.

Dig a cistern, or rather a double one, according to Fig. 1, making one larger and deeper than the other, and, if possible, make as large as needed, remembering that the smaller will help some. Begin at the bottom of the side wall and lay one course of brick flatways all around, then commence and lay the brick up edgewise until near the top, then flat, while arching the top.

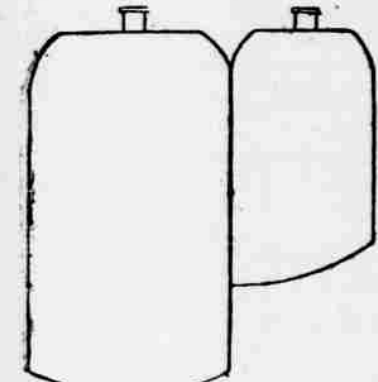


FIG. 2.

Leave a space of about one inch behind the brick work and every two or three courses fill in the space thus left with a thin grouting of sand and cement, until the top is reached. As soon as the wall of the main cistern is up to the smaller one join the outside walls of both and carry up together. Thoroughly cement the corners at A, A, Fig. 1, and also at the bottom where the filtering wall B is to be laid. Lay filtering wall of porous or hollow brick, well bedded and jointed with cement, but do not plaster on either side. After the walls are up fix the bottom, and thoroughly cement the outside walls and bottom with two good coats of cement. Make both inlet and outlet pipes in receiving part of cistern. As will be seen by Fig. 1, when the water is drawn below the lowest point of the smaller cistern the latter will be empty and can easily be entered and all accumulations of dirt removed. Be sure to build deep enough in the earth so as to escape frost—not less than two feet from the top of the ground, in the latitude of northern Ohio.—R. Clement, in Ohio Farmer.

### FACTS FOR FARMERS.

THERE is no use trying to save a blighted pear tree with any application for that purpose until all the affected limbs are removed. The same rule applies to black knot on plum and cherry trees.

GRAPES will not mature after picking, as fully-grown pears and apples do; so if you wish them to keep well they must be thoroughly ripened on the vines. With proper care and handling they may be kept well into the winter.

A NEW enemy of the potato vine has made its appearance in Michigan. The vine when attacked begins to wilt at the top. In the hollow of the stem is found a worm nearly an inch in length, which appears to sap the life of the plant.

DO NOT plant a tree unless you know how to take care of it. Some people will plant expensive trees and shrubs and find out how to take care of and protect them only after the tree has become the prey of some of its numerous enemies.

A WRITER in the National Stockman says that the speed of bees is greatly overestimated. They do not fly from empty at a greater speed than fifteen to twenty miles per hour, and when loaded do not make more than half that speed.

## AN EXCELLENT PLAN.

Benefits Incidental to Keeping a Variety of Live Stock.

One of the benefits derived from keeping a variety of stock is that farm products can be used to better advantage. In growing the necessary grain, more or less straw and fodder will be secured, which, if properly managed, will make a cheap food, and where a system of rotation is carried on more or less grass for both pasture and hay will be grown.

With good shelter young cattle, horses or mules can be kept in a good condition during the winter with very little grain if they can have plenty of fodder, and during the summer grass in the pasture can be made nearly or quite their whole feed. While hogs will make a fair growth with good pasture it is generally profitable to feed them some grain even during the summer. Cattle can be pastured during the summer and fed largely upon fodder during the winter until they are three years old, and if comfortably sheltered will need but little grain. With good pasture they will be in a fair marketable condition in the fall when they are three years old.

Horses, mules and sheep can be kept in the same way and can be made ready for market with very little grain. Hogs, however, must be fattened largely upon grain, and more or less grain is needed by the work teams and milk cows. In raising grain for them more hay and fodder than will be needed will be secured, and by purchasing mill feed to go with them all can be used to a good advantage. This plan admits of having a considerable acreage seeded down to grass for pastures and meadows and lessens the labor considerably. By feeding all of the products out on the farm, with the exception of the wheat, and buying more or less mill feed to use in connection with the grain and fodder will make a great saving, and applying all of the manure possible the fertility of the soil can be kept up.

Of course everything that can be used for feed should be saved and every advantage be taken to secure all of the food possible, and then feed out to the best advantage in order to realize the largest profit.—Prairie Farmer.

### THE HIDEBOUND HORSE.

How an Animal Afflicted with the Allment Can Be Cured.

This disease occurs often with the horse and sometimes with the dog. The animal as a rule is always hungry and thin, the skin sticking to the ribs, fitted to the bones almost as tight as a drum. The disease is caused generally by poor feed, or by the animal being a greedy feeder and not digesting its food. A farmer who feeds poor, smutty food, and not very often, will get his horse into the habit of plunging his head into the manger and gulping food as if he were going to catch a train. In a little while the horse begins to look thin and does not act as lively as usual and the owner does him with condition powders, but without avail, and it is not long before his horse is run down. First, says a writer in New York Tribune, give the animal a dose of some good purgative, and at the same time give him a rest. Then I would give about every three days in his evening feed a teaspoonful of powder composed as follows: Gentian root, three drachms; sulphate of iron, two drachms; which can be obtained of any reliable druggist. When I say evening feed I mean a feed composed not of oats and hay but of something in the style of bran, fine feed or middlings. When you have given about five of these doses I would discontinue them for about three weeks and then give him three or four more. I tried this on a very bad case and the animal in less than a month was a new horse, it having put flesh on her and life and soul into her. When she was sick I think she was one of the greediest feeders I ever saw eat, but now she is quite calm when the feed is brought to her and eats with ease and digests every bit of it, so that everything that passes her lips is of benefit to the system.

High Roosts an Abomination. High roosts are an abomination. The large, heavy hens can only reach the high roosts with difficulty, and they are liable to be dislodged from their position, thrown off and injured by the fall. Make the roosts low—a foot from the floor being sufficiently high—and have all the roosts on a level, instead of making them step-like; that is, one higher than the other. Bumble foot, lameness of the joints and other ailments are often due to high roosts, and it is to their seeking lofty perches that young turkeys are usually affected with swollen feet and legs. It is really doubtful if roosts are at all necessary in a poultry house, as those who have tried the plan of providing litter for the hens, and cleaning it away daily, report that the hens keep in much better condition, being less liable to draughts of air, and are seldom lame. It is an experiment worthy of a trial, as the removal of the roosts will render the interior of a poultry house more roomy and convenient.—Farm and Fireside.

### Hints About The Draining.

In tile draining a good main or outlet is essential. I use either five or six-inch, according to amount of water to be carried. Lay the main with the natural flow, if practicable, and a foot deeper than the laterals, so as to make the connection perfect on top of the main, giving a free flow. Make the connections perfect so there will be no earth working through. The accompanying cut shows the arrangement; a is the main, b the connecting arm and c the lateral. A flat stone will close the top of the arm all right. I place laterals about two feet deep, more or less, according to soil, etc., and place them three to seven rods apart, and if possible, across the natural flow, thereby cutting off surface water more quickly.—J. F. Jamieson, in Ohio Farmer.

## SERIOUS CHARGE.

The Burning of the Records at Washington, Ind., Alleged to Be the Work of a Slaveholder.

WASHINGTON, Ind., Oct. 15.—Detectives, who have been at work for a week on the courthouse fire, arrested Samuel Harbison, a day laborer, last night charged with complicity in the burning of the records. He confessed and implicated several prominent people in it and as a result Auditor James S. Lavelle and T. B. Hawes, a prominent citizen of Steele township, were arrested and placed in jail, also a man by the name of Basil Ledgerwood.

Harbison's story is that Lavelle hired him to burn the courthouse for \$500, only \$5 of which has been paid. It is reported that Ledgerwood is also anxious to turn state's evidence. He claims to have been given a house and lot for his part in the crime. Auditor Lavelle's bondsmen becoming frightened at the turn affairs were taking, required him to turn all his property over to them yesterday.

Lavelle has been auditor of the county for eight years and the fact that people had confidence in him makes his arrest the sensation of the hour. From present circumstances it is supposed he is short in his accounts, but no one knows the amount. Experts are now at work on his books.

Hawes lives on a farm of 500 acres, owned by his wife and is in good circumstances. He is a desperate character and was brought in at the muzzle of a Winchester.

The four parties in jail were taken before Judge Hefron. Ledgerwood and Harbison pleaded guilty and the other two waived hearing and bonds were fixed at \$5,000 each.

### A LONG ISLAND GALE.

Twelve or Thirteen Persons Missing, Supposed to Have Been Drowned.

NEW YORK, Oct. 15.—The fearful storm which has raged in this vicinity since Sunday has wrought immense damage along the Long Island coast. At Rockaway waves nearly thirty feet high are lashing the beach, blowing far into the sand and washing buildings and boats out to sea. Many pleasure crafts have been missing since Sunday and it is feared they have been lost with all on board.

George White, Alfred Kane, Mark Murphy and Alden Little, of New York, hired two boats Sunday for a day's fishing. They have not been seen, but one of the boats has been picked up and there is hardly a doubt but that all four men have been drowned.

At Helland's station on Rockaway beach seven boats were let out on Sunday. They carried sixteen men. None of them have since been heard from, and it is thought they have been carried out to sea. As the water outside the inlet ranged mountain high, so that a small boat could scarcely live in it a minute, the sixteen men were probably drowned.

A two-masted schooner sailed by Jans Moore and having a crew of three men, put out from Canarsie Sunday afternoon. She was caught in the storm and the three sailors were swept off the deck. The captain was finally rescued. He is believed to be insane from his awful experience. Over twenty lives are believed to have been lost.

### REBELLION IN RUSSIA.

Unhappy Spirits Take Advantage of Existing Distress.

ST. PETERSBURG, Oct. 15.—A revolutionary society at Kieff is endeavoring to take advantage of the prevailing famine to excite a revolt. Exiles from Switzerland and France have guided the movement. The authorities have broken up their secret literary clubs, prohibited all their meetings called for discussions and scattered their books to the winds. There was a reunion of the students, convened to petition the authorities for the release of such of their number as had been arrested, but the governor, instead of acceding to their request, threatened to surround the university with Cossacks.

The government is negotiating for the purchase of large quantities of breadstuffs in the United States.

The government is purchasing corn for the purpose of feeding the famishing peasants of the stricken district during the winter months. The sufferers of the Volga district will be the first to receive assistance, as it is considered absolutely necessary to succor them before the Volga is frozen over. Twenty pounds of wheat will be given to each person.

### PASSENGERS KILLED.

Serious Wreck on the Baltimore & Ohio Road—Two Passengers Killed and Ten Badly Injured.

FORT WAYNE, Ind., Oct. 15.—Train No. 8, of the Baltimore & Ohio, which left Chicago yesterday at 10:10 a. m., met with a serious accident at 2:31 p. m., at Hicksville, O., twenty miles east of Carret, Ind.

The train consisted of the engine and tender, baggage car, smoker, ladies' coach and private car of Vice-President King. The whole train left the track, and the sleeper, ladies' coach and the private car went over an embankment. The smoker and baggage car hung to the engine and were kept on the bed of the road.

Two passengers were killed, ten seriously injured and a score or more slightly injured, as follows:

Killed—Thomas Waterstone, of Bridgewater, O., and A. M. Mathews, of Boone, Ia.

Seriously injured—L. W. Grubaugh and wife, of Mansfield, O.; Mrs. Sarah Snyder, of Porter, O.; Mrs. Thomas Waterstone, of Bridgewater, O., and Miss Rhoda Woodall, of Buffalo, N. Y.

### Centennial of a Defeat.

TOLEDO, O., Oct. 15.—November 4, 1791, Gen. Arthur St. Clair was disastrously defeated by the Indians at Fort Recovery near the northern border of Darke county. Yesterday the centennial celebration which will last three days began. It is expected that it will result in the erection of a monument to mark the spot. Yesterday afternoon Gov. Campbell delivered the opening address with a response by Hon. B. F. Sessions, of Columbus. Gen. Ebenezer Finley, of Bucyrus, then delivered an address on Gen. Arthur St. Clair and the battle of Fort Recovery.

## ECUMENICAL COUNCIL.

The Brethren Somewhat Excited Over the Proposed Methodist Federation.

WASHINGTON, Oct. 16.—Rev. Dr. Donnelly, of the Irish Methodist church, presided over the Ecumenical Methodist council at the beginning of the eighth day's session. The first business was further consideration of the report of the business committee, in response to a memorial on Methodist federation. Dr. Stephenson, for the committee, suggested a few alterations in the original text.

Rev. Dr. Collier, of England, thought it would be better to adopt no resolution relative to Methodist union at this time, as such action might be regarded as approaching a violation of the rules that the council had agreed to accept. The resolution should read "unity," or preferably "Christian unity," instead of "union," and "United Kingdom" instead of Great Britain, which excluded Ireland.

Rev. Dr. Ralph Abercrombie, of England, regretted that the proceedings of the morning had not been characterized by that spirit of harmony which seemed to be proper in the consideration of the subject of unity. It reminded him of the old hymn, "Into a world of ruffians sent, I walk on hostile ground."

A deprecating murmur went up at this quotation, but hardly had Dr. Abercrombie taken his seat before there was a struggle for the floor.

Dr. Leonard, of New York, insisted upon recognition, although the chair had already accorded the floor to Dr. King.

Immediately there followed a scene of great confusion and disorder, the chair refusing to recognize Dr. Leonard and the latter shouting repeatedly: "Mr. Chairman! Mr. Chairman! I rise to a point of order."

Nothing could be done in the way of transacting business and considerable fear feeling developed. Dr. Ravey, an Englishman, called out that if the delegate persisted in rebelling against the chair's orders he should be suspended, whereupon an Irish delegate attempted to move Dr. Leonard's suspension. The chairman explained that he had no wish to sit down upon a member, but that he had recognized Dr. King first.

But Dr. Leonard was not content. Forcing his way toward the front, he kept calling out: "Mr. Chairman, Mr. Chairman!"

Dr. Lanahan, of Baltimore, exclaimed that Dr. King had the floor and added: "It is out of order for anybody to try to bulldoze the chair."

These appeals had the desired effect. Dr. Leonard abandoned his effort to make his point of order, and Dr. King, the secretary, was recognized. His object, it appeared, was to postpone the further discussion of the subject of federation until to-morrow morning, and although Mr. Hughes and others urged that a vote be taken at once on the adoption of the first resolution on the ground that otherwise the "wrangling" would be resumed to-morrow, Dr. King's motion to adjourn the debate prevailed by a vote of yeas 158, nays 146.

### FATAL MIDNIGHT RIDE.

Awful Fate of Three Reporters Who Wanted to Write Up and Illustrate a Midnight Ride on a Locomotive.

CHICAGO, Oct. 16.—An accident, resulting in the death of three members of the Inter Ocean newspaper staff and the engineer and the serious injury of several other passengers, occurred on the Chicago & Eastern Illinois railroad at Crete. The dead are: Leonard Washburne, sporting editor of the Inter Ocean.

Fred W. Henry, a reporter who had come here recently from Louisville.

J. A. McCafferty, an artist, recently from St. Louis.

James Clark, engineer. The train left Evansville early yesterday morning and proceeded safely to Crete, where it ran into an open switch. The three men who were killed were on the engine, Henry and McCafferty having gone out for the purpose of writing up and illustrating a midnight ride on the fast train, and Washburne, who was returning to Chicago from an Indiana trip, having joined his friends on the train.

The accident came without warning and as the locomotive plunged from the track the four men were caught and completely buried beneath the wreck.

Mr. Washburne was to have been best man last night at the wedding of one of his associates, Thomas R. Weddell, assistant city editor of the Inter Ocean. The news of his tragic end was kept from Mr. Weddell and his bride and the happy ceremony took place shortly after poor Washburne's body reached the city.

### The German Minister Dead.

BERLIN, Oct. 16.—Count Ludwig Von Arco-Valley, minister of the German empire to the United States, is dead. On Monday Prof. Bergmann performed an operation on the count, his stomach for some time past having refused to receive any food. The operation was unsuccessful. The brother and sister of Count Von Arco-Valley were at his bedside when he died.

### Officers of the Prison Congress.

PITTSBURGH, Pa., Oct. 16.—The following officers of the national prison congress were chosen for the ensuing year at the closing meeting to-day: President, Hon. R. B. Hayes, of Fremont, O.; vice-president, Roosevelt Birkhoff, of Mansfield, O.; secretary, Rev. John L. Milligan, of Allegheny City; treasurer, Charles W. Jessup, of New York city.

### Hailed By Anthony Comstock.

NEW YORK, Oct. 16.—Anthony Comstock, with five assistants, raided "Stevens" Brodie's saloons at 114 and 353 Bowery, and gathered in over 100 pictures and a quantity of cards on which rhymes had been printed. Brodie was arrested and taken to police headquarters where he gave bail in the sum of \$500 to appear Monday morning in court to answer to the charge of exposing to view obscene pictures and literature. The pictures were valued at about \$300. Brodie bought them in Paris over a year ago. Brodie says Comstock raided him for spite.

## GOV. STEELE'S REPORT.

Matters of Moment Referred To By the Governor of Oklahoma.

GUTHRIE, Ok., Oct. 15.—Gov. Steele's first report to the secretary of the Interior has been prepared and forwarded to Washington.

The school problem in the new counties is treated as follows: "I am very sorry indeed that provision was not made by congress for helping the settlers support the common schools in the Sac and Fox, Iowa, Pottawatomie and absentee Shawnee lands recently thrown open to settlement, for those settlers are not only poor as were those who came into this part of the territory, but they will have the additional burden of caring for the Indian children in great numbers who may attend the common schools, notwithstanding the fact that the lands or personal property of these Indians may not be taxed to help support the schools. This will be true with reference to the Cheyenne and Arapahoe and Kickapoo country, which it is hoped will be thrown open to settlement early next spring. It seems to me there is more reason for helping the settlers support the schools in these lands than there was in Oklahoma proper."

Concerning the opening of the Cherokee strip this is said:

"Nothing I think of would be more gratifying to the people of not only Oklahoma but those of Arkansas, Missouri, Texas, Kansas and other states who are anxious for homes than would be the opening of the Cherokee strip. There is every reason why it should be thrown open to settlement and none that I know of why it should not be."

As to town sites Gov. Steele says in part: "I hope before any other town sites are thrown open to settlement the town sites will be carefully selected, surveyed, platted and published, and I earnestly recommend a different mode of opening town sites to settlement. At the recent opening of Tecumseh and Chandler there were at least 5,000 people at each place waiting for the signal to be given for entering said town sites, containing 2,400 lots, good and bad. A very large proportion of those intending to enter the sites were anxious to go in on foot to avoid the danger incident to riding in on horseback or in wagons and vehicles of various kinds. One man was killed by his horse falling on him, others were more or less injured, but the real settlers were in too many instances deterred from attempting to get a lot or a home from the very fact that horsemen were allowed to ride in. Lawyers without clients abound; bankers without banks or capital are there; real estate speculators without customers, gamblers, whisky peddlers and bootleggers all before the opening were there to ply their vocation."

The governor speaks of the opening of the lands on the western border as follows: "On account of a great many of the Indians refusing to take their allotments much delay has been caused in the allotting of lands to the Cheyennes and Arapahoes, and I am informed that the appropriation for making these allotments is practically exhausted. Unless it is possible to make other arrangements to throw these lands open to settlement early next spring so that settlers may raise a crop next year, it will mean hardship, destitution, sickness and death among the hundreds of settlers who have been along its borders for weeks, and in many instances for months, waiting for homes."

### WORLD'S FAIR WORRIES.

Proposed Dropping of a Department—The Big Loan—Etc.

CHICAGO, Oct. 15.—The congressional loan of \$5,000,000 to the world's fair, Maj. Handy and his department of publicity and promotion, and Director General Davis' report were considered by the board of control of the national commission, which went into session for its October meeting yesterday. At the same time the Chicago directors held a session of their executive committee upon practically the same subjects.

During the session of the directors a request was sent to the board of control for a special joint conference of the board of reference and control to be held Friday, to consider, it is said, the advisability of abolishing the entire department of publicity and promotion of which Maj. Handy who draws \$7,500 a year from the treasury and has a large staff of assistants is chief. President Baker, Director Walker and others seemingly have an idea that the world's fair does not need a press department any longer and that the department chiefs can furnish all useful information to exhibitors and the newspapers.

The board of control after discussing the loan question concluded that the committee on legislation had exclusive jurisdiction in the matter. Commissioner Massey, who is on that committee, said the draft of the loan bill to be presented to congress would probably originate in the Chicago directory and then come before the committee on legislation. When this stage should be reached the members of the national commission would be prepared to say whether they would support the bill as framed.

The local directory are understood to favor Secretary Butterworth as the right man to conduct the negotiations for the loan before congress. The members of the board of control are said to be against his selection. Opposition to Secretary Butterworth is represented as hinging to some extent on the fact that he, instead of one of the national commissioners, was made chairman of the recent special commission to Europe.

### A New Bishop.

BOSTON, Oct. 14.—Rev. Dr. Phillips Brooks was this morning consecrated as bishop of Massachusetts. The service took place at Trinity church and was preceded by morning prayer, which was held at 8 o'clock. The general service occupied about three hours and was most impressive. Phillips Brooks was born in Boston, Mass., December 13, 1835. He was graduated at Harvard college in 1855, studied theology at the seminary in Alexandria, Va., was ordained in 1860, and became rector of the church of the Advent, Philadelphia.

## STOCK ITEMS.

A first-class cow, well cared for, on any farm in the land is a storehouse of comfort and economy.

The cow for economy is the one that from a quantity of food will produce the most and best milk and butter.

Feed brood sows oats, bran and oilmeal in connection with corn, and do not depend upon corn alone. Corn is a good feed when used in connection with other materials, but it is not a good feed for brood sows when used exclusively.

Calves need plenty of roughness, and if this is of a good quality and fed under a comfortable shelter, very little grain will be necessary. A little bran and oilmeal, or bran and cornmeal, make up a very complete ration with roughness.

The small potatoes, turnips, carrots or other roots, if boiled and mixed with bran, make a wholesome, nutritious food for growing and breeding hogs. By providing warm, dry quarters less food will be required to winter than when they are left to look out for themselves.

Of all animals kept on the farm, with none is it more necessary to secure a quick growth and an early maturity than with pigs. If the sows are mated in November they will farrow in February. It is best always to keep a record so as to make whatever arrangements are needed at the proper time.

It is only in exceptional cases that it will pay to feed an animal even for a short time after it is fully ready to market. The expense of feeding will require considerable advance in the price to return a profit. The safest plan is to push the growth and then market as soon as they are fully ready.

A great many farmers do not keep good cows and thus have abundance of rich cream, and milk and butter, because they say "it is so much trouble to milk." The man who makes his living out of the soil and who cannot in some way find somebody to milk two or three cows is four thousand years behind this age of common sense and common comfort.—Exchange.

Many prefer to have the sows farrow in February rather than in March, as the weather is more settled and the pigs have that much longer to grow before severe cold weather in the fall. The first six weeks, at least, the pigs must depend very largely upon their mother's milk for sustenance, and by the time they are able to eat grass will have made a good start to grow.

Colts need to run out every day that the weather will permit. There is no benefit in exposing them in storms or in extremely cold weather. At such times they will be better confined in comfortable quarters, but every day that will admit they should be allowed to run out. Calves need exercise less than colts, yet they will be better if allowed to run out in pleasant weather.

### FARM NOTES.

While turnips and cabbage can be left out until the heavy frosts, yet it is not a good plan to leave out too late.

One advantage in winter manuring of wheat is that it acts as a mulch to the plants as well as benefits the soil.

A good healthy chicken six weeks old can pick up its own living around almost any farm yard. When it is four or six months old its flesh is worth twice as much per pound as either beef, mutton or pork.

An exchange remarks: "We know a great many farmers who own 250 acres of good land, in good districts, near railroads and fine towns, who make butter that is just fit for a very hungry hog to eat. In that 'business' in this age of progress on the farm?"

Of rye Secretary Rusk, of the agricultural department, says: "It is hardy, the straw is valuable and the average yield an acre is enough larger than that of wheat to cover the difference in selling price. I believe it would be quite as profitable as wheat."

The use of wood ashes as a fertilizer should be more generally understood. Hardwood ashes are much richer in potash than softwood ashes and are relatively more valuable. Leached wood ashes are hardly worth more than the labor of spreading on the lands as a rule.

The time when corn can be cribbed depends largely upon the season. Some years it can be husked out and cribbed much earlier than others. Generally a short time after there is a killing frost corn will do to crib, especially fodder corn. It is nearly always best to husk out and throw directly into wagons, as throwing upon the ground causes waste.

Save your own tomato seed from the choicest specimens you can find. For seed choose only those that are smooth and round and that ripen fully up to the stem. Save seed of pepper, eggplant, snap beans, bush butterbeans and corn. Let all seeds dry good and put up in paper bags. See that they are kept in a dry place and out of the reach of rats.

Twenty-five years ago not one farmer in one hundred knew what celery looked like, few having heard of the plant. First-class hotels in the cities had it occasionally. To-day the crop is worth millions of dollars annually and is in use throughout the land. At Kalamazoo, Mich., the crop was first grown in 1875, in a very small way. In ten years the crop grown at this place alone was valued at one-fourth of a million of dollars, and land comparatively worthless before celery was grown is valued at from \$30 to \$500 per acre.

### Notes.

Never permit a calf to stop growing. An important work now is to get ready for winter. Better a little early than a little late with work of this kind.

If five cents more per bushel, or one cent more per pound, can be secured by knowing the market and using good judgment in selling, it is that much more clear profit.

A farmer in Dawson county, Neb., raised forty bushels of rye to the acre. He refused an offer of 85 cents per bushel for the crop which, had he sold, would have brought him \$3,400.